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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,415	12/31/2003	Michael J. Mills	75622P005701	4650

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EXAMINER

HAROLD, JEFFEREY F

ART UNIT PAPER NUMBER

2614

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/750,415

Applicant(s)

MILLS, MICHAEL J.

Examiner

Jefferey F. Harold

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The references listed in the Information Disclosure Statement submitted on July 14, 2004, have been considered by the examiner (see attached PTO-1449).

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-8, 10-19 and 21-23** are rejected under 35 U.S.C. 102(b) as being anticipated by Bremmer (United States Patent 6,377,681).

Regarding **claim 1**, Bremmer discloses a signal line driving circuit with self-controlled power dissipation. In addition, Bremmer discloses a process comprising: controlling a variable power supply to supply power at approximately a first supply level for an electronic device; identifying a second supply level to be supplied for the electronic device; and in response to identifying the second supply level, controlling the variable power supply to control a transition of the power from approximately the first supply level toward the second supply level prior to controlling the variable power supply to supply power at approximately the second supply level for the electronic device, as disclosed at column 3, line 3 through column 33 and exhibited in figure 1.

Regarding **claim 2**, Bremmer discloses everything claimed as applied above (see claim 1), in addition, Bremmer discloses identifying that the second supply level satisfies one or more of one or more predetermined conditions, as disclosed at column 3, line 33 through column 5, line 26 and exhibited in figure 2.

Regarding **claim 3**, Bremmer discloses everything claimed as applied above (see claim 2), in addition Bremmer discloses identifying that the power for the electronic device is to change to the second supply level in response to a change between different operation states of the electronic device, as disclosed at column 3, line 33 through column 5, line 26 and exhibited in figure 2.

Regarding **claim 4**, Bremmer discloses everything claimed as applied above (see claim 3), in addition Bremmer discloses wherein the electronic device comprises subscriber line interface circuitry and has at least an off-hook operation state, an on-hook operation state, and a ringing operation state, as disclosed at column 3, line 33 through column 5, line 26 and exhibited in figure 2.

Regarding **claim 5**, Bremmer discloses everything claimed as applied above (see claim 2), in addition Bremmer discloses identifying that the difference between the second supply level and the first supply level satisfies one or more of one or more predetermined relationships with one or more thresholds, as disclosed at column 3, line 33 through column 5, line 26 and exhibited in figure 2.

Regarding **claim 6**, Bremmer discloses everything claimed as applied above (see claim 2), in addition Bremmer discloses identifying that the second supply level satisfies one or more of one or more predetermined relationships with one or more

supply level ranges, as disclosed at column 3, line 33 through column 5, line 26 and exhibited in figure 2.

Regarding **claim 7**, Bremmer discloses everything claimed as applied above (see claim 2), in addition Bremmer discloses wherein the controlling the variable power supply to control a transition of the power from approximately the first supply level toward the second supply level comprises generating an analog ramp signal to control the variable power supply, as disclosed at column 3, line 33 through column 5, line 26 and exhibited in figure 2.

Regarding **claim 8**, Bremmer discloses everything claimed as applied above (see claim 2), in addition Bremmer discloses wherein the controlling the variable power supply to control a transition of the power from approximately the first supply level toward the second supply level comprises controlling the variable power supply to change the power to approximately one or more intermediate supply levels prior to controlling the variable power supply to change the power to approximately the second supply level, as disclosed at column 3, line 33 through column 5, line 26 and exhibited in figure 2.

Regarding **claims 10-19 and 21-23**, they are interpreted and thus rejected for the reasons set forth above in the rejection of claims 1-8.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. ***Claims 9 and 20*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bremmer in view of George (United States Patent Application Publication 2005/0074115).

Regarding **claim 9**, Bremmer discloses everything claimed as applied above (see claim 1), in addition Bremmer discloses variable DC power, however, Bremmer fails to disclose wherein the variable power supply comprises a direct-current to direct-current (DC-DC) converter and wherein the controlling the variable power supply comprises generating one or more control signals to control the DC-DC converter. However, the examiner maintains that it was well known in the art to provide wherein the variable power supply comprises a direct-current to direct-current (DC-DC) converter and wherein the controlling the variable power supply comprises generating one or more control signals to control the DC-DC converter, as taught by George.

In a similar field of endeavor George discloses a direct drive for a subscriber line differential ringing signal. In addition, George discloses wherein the variable power supply comprises a direct-current to direct-current (DC-DC) converter and wherein the controlling the variable power supply comprises generating one or more control signals

to control the DC-DC converter, as disclosed at paragraph [0067] – [0083] and exhibited in figures 2, 9, and 14.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bremmer by specifically providing wherein the variable power supply comprises a direct-current to direct-current (DC-DC) converter and wherein the controlling the variable power supply comprises generating one or more control signals to control the DC-DC converter, as taught by George, for the purpose of generating power supply of appropriate voltage to drive the SLIC.

Regarding **claim 20**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 9.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/750414. Although the conflicting claims are not identical,

they are not patentably distinct from each other because both applications are drawn the inventive concept of varying the power supplied by the SLIC to an electronic device

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

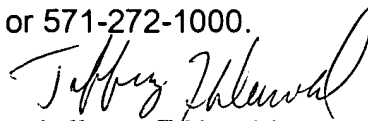
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JFH  
June 12, 2006



Jefferey F Harold  
Primary Examiner  
Art Unit 2614